SECTION 09 2116

GYPSUM BOARD SYSTEMS

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LANL MASTER SPECIFICATION

When editing to suit project, author shall add job-specific requirements and delete only those portions that in no way apply to the activity (e.g., a component that does not apply). To seek a variance from applicable requirements, contact the ESM Architectural POC.

When assembling a specification package, include applicable specifications from all Divisions, especially Division 1, General Requirements.

Delete information within “stars” during editing.

Specification developed for ML-3 projects. For ML-1 / ML-2, additional requirements and QA reviews are required.

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PART 1 GENERAL

1.1 SECTION INCLUDES

A. Metal stud wall framing.

B. Metal channel ceiling framing.

C. Gypsum board and joint treatment.

D. Acoustic insulation.

1.2 SUBMITTALS

A. Submit the following in accordance with Section 01 3300, Submittal Procedures:

1. Catalog data on metal framing, gypsum board, joint tape, joint compound and texturing materials.

2. Gypsum manufacturer’s documentation of recycled content for gypsum board.

3. Gypsum manufacturer’s documentation of buyback and/or recycling program.

4. Submit manufacturer’s written certification that all materials are free of asbestos.

5. Manufacturer’s installation instructions.

6. Twelve inch square sample of gypsum board with texture finish.

1.3 QUALITY ASSURANCE

A. Perform work in accordance with ASTM C840, GA-201, GA-214, GA-216 and GA-600.

1.4 REGULATORY REQUIREMENTS

A. Conform to UBC for fire rated assemblies as follows:

1. Fire Rated Partitions: Listed assembly UL U465 for 1 hour rating, UL U411 for 2 hour rating.

2. Fire Rated Ceiling [and Soffits]: Listed assembly UL. [edit as required]

3. Fire Rated Shaft Walls: Listed assembly UL. [edit as required]

PART 2 PRODUCTS

2.1 PRODUCT OPTIONS AND SUBSTITUTIONS

A. Comply with Section 01 2500, Substitution Procedures.

2.2 MANUFACTURERS

A. Georgia Pacific Corp.

B. National Gypsum Company.

C. United States Gypsum Company.

2.3 FRAMING MATERIALS

A. Studs and tracks conforming to ASTM C645 and GA-600; 25 gage galvanized sheet steel, C shape, with knurled faces.

B. Furring, framing and accessories conforming to ASTM C645 and GA-600.

C. Fasteners conforming to ASTM C514 and GA-216.

D. Adhesive conforming to ASTM C557 and GA-216.

2.4 GYPSUM BOARD MATERIALS

A. Recycled Content: Gypsum recycled content to be the greatest amount available, up to 28 percent post-industrial content. Subject to compliance with requirements, use synthetic (flue-gas) gypsum when available. Paper facing to be 100 percent post consumer recycled content. Fiber gypsum board shall

consist of recycled newspaper and gypsum over recycled newspaper, gypsum and perlite core.

B. Gypsum board conforming to ASTM C36 and ASTM E119, fire resistive, Type X, 5/8 inch thick, maximum practical length, with square cut ends and tapered edges.

C. Moisture resistant gypsum board conforming to ASTM C630, 5/8 inch thick, maximum practical length, with square cut ends and tapered edges.

D. Gypsum coreboard conforming to ASTM C442, 1 inch thick, maximum practical length, with square cut ends and tapered edges.

2.5 ACCESSORIES

A. Acoustic insulation conforming to ASTM C665, preformed glass fiber batts, 3 1/2 inches thick, unfaced, friction fit type.

B. Self-drilling, self-tapping screws, bolts, nuts and washers with hot dip galvanized finish.

C. Corner beads of metal and paper construction.

D. Edge bead conforming to ASTM C1047, GA-201 and GA-216.

E. Joint materials conforming to ASTM C475, GA-201 and GA-216; reinforcing tape, joint compound, adhesive (all 100 percent asbestos free) and water.

F. Latex based texture finish materials.

PART 3 EXECUTION

3.1 METAL STUD INSTALLATION

A. Install studs at 16 inches on center, in accordance with manufacturer's instructions and ASTM C754.

B. Refer to Drawings for locations of studding extending to the ceiling, through the ceiling, and to structure above.

3.2 ACOUSTICAL ACCESSORIES INSTALLATION

A. Refer to Drawings for location of partitions with acoustical treatment.

B. Install acoustic sealant at joint between gypsum board and floor, and to seal penetrations of partitions by conduit, pipe, ductwork, etc.

C. Place acoustic insulation between studs, around cut openings, behind and around electrical and mechanical items within or behind partitions, and tight to items passing through partitions.

3.3 SHAFT WALL INSTALLATION

A. Install in accordance with manufacturer's instructions to GA-600 requirements.

3.4 SUSPENDED CEILING GRILLAGE INSTALLATION

A. Install grillage in accordance with ASTM C754.

B. Suspend 1-1/2 inch furring channels from structural members with 8 gage wires at 48 inches on center, and within 6 inches of walls.

C. Install furring channels at right angle to channels at 16 inches on center using formed clips.

3.5 GYPSUM BOARD INSTALLATION

A. Install gypsum board in accordance with manufacturer's instructions.

B. In non-fire rated partitions, erect single layers of gypsum board in most economical direction, with edges and ends occurring over firm bearing.

C. In fire rated partitions erect single layer of gypsum board vertically, with edges and ends occurring over firm bearing.

D. Install screws in accordance with manufacturer's instructions.

E. In double layer installations, erect second layer perpendicular to first layer, secured to first layer with adhesive. Offset joints of second layer from joints of first layer.

F. Treat cut edges and holes in moisture resistant gypsum board with sealant.

G. Install corner beads at exterior corners. Install edge trim where gypsum board abuts dissimilar materials.

3.6 JOINT TREATMENT

A. Tape, fill and sand exposed joints, edges and corners to produce smooth surface, ready for finish.

B. Feather coats onto adjoining surfaces so that camber is maximum 1/32 inch.

3.7 TEXTURE FINISH

A. Apply finish texture coating to attain a light sand finish.

3.8 TOLERANCES

A. Maximum variation of finished gypsum board surface from true flatness is 1/8 inch in 10 feet in any direction.

END OF SECTION

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Do not delete the following information:
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This project specification is based on LANL Master Specification 09 2116 Rev. 0, January 6, 2006.